

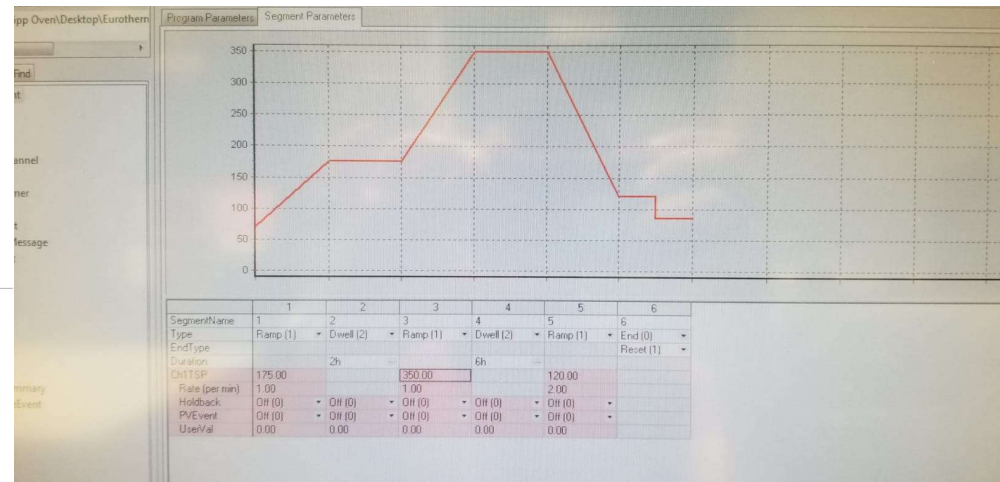
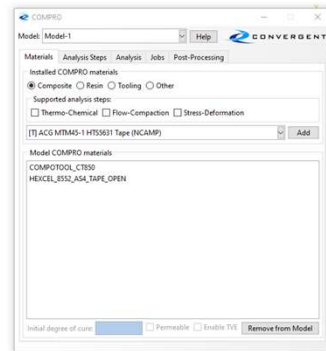
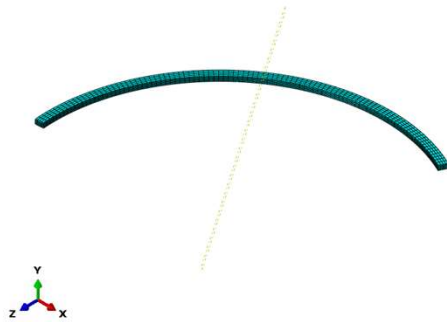
pfRICH end ring prototyping updates

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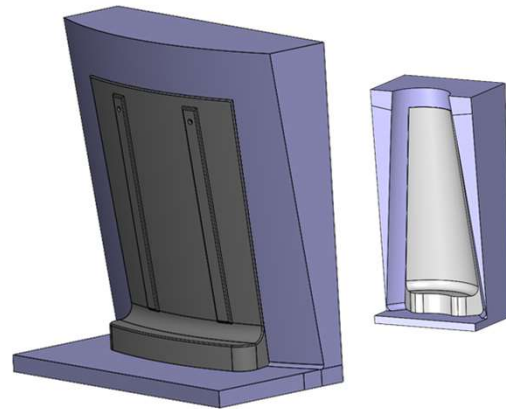
- ⬢ Decided to go with a concave tool
- ⬢ So that the spring in will help in the tool-part removal
- ⬢ Simulation Set Up is on-going

- ⬢ Heat transfer analysis completed to make sure that we get good degree of cure in the thick layup.



- ◊ Mirror – trials for Lexan to CFRP bonding – co-curing this week
- ◊ Goal is to have even dispersion of epoxy between the lexan and CFRP
- ◊ Bill – Post deposition – Mirrors with the CFRP substrate need to be heated to 300° C for post processing
 - ◊ CURRENT CHOICE OF CFRP WILL NOT WITHSTAND 300°C
 - ◊ Working to find out alternative materials for mirror base substrate.
- ◊ Thermal testing started last week to see what substrate we can use for this that is in stock here at Purdue
- ◊ I have 2 lexan sheets from Bill/SBU
 - ◊ Creating the vacuum glue that Preet mentioned and sending him those samples this week !
- ◊ **Confirm the max temp for CFRP to be used in mirror substrate**

- ◊ Got email from Alexander/Alex/Charles for timelines on the mirror substrate as well as end plates
- ◊ Final designs needed for both to give a schedule to integrate with Charles's Gantt chart
- ◊ Are we making just 2 mirror sections (each/ 4total) or more? This effort will start after the co-curing/bonding figured out. → correct



- ◊ What is the final sensor plate design to manufacture? The one which is modified for beam testing or a full sensor grid?
 - ◊ Prototype on small samples
 - ◊ Full sensor plane is envisioned for PED manufacturing
- ◊ Am I making the "End Ring" that goes on the inside – around the beam pipe?

